

REMARKS

In the Office Action, the Examiner rejected claims 75, 78, 79, 81, 82, 99, 102, 103, 105 and 110-113 under U.S.C. § 103(a) and withdrew from consideration claims 83-98, 101, 104 and 106-109. By this paper, no claims are amended, added or cancelled. In view of the foregoing amendments and the following remarks, Applicants respectfully request allowance of the pending 75, 78, 79, 81, 82, 99, 102, 103, 105 and 110-113.

Election/Restriction

In the Office Action, the Examiner withdrew claims 83-98, 101, 104 and 106-109 from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species. Applicants traverse these restrictions.

Applicants respectfully submit that the restriction is improper because the subject matter recited by the above claims is generic to all species. Independent claim 83 recites “a family of joints” that includes a variety of joints generic to all species. For example, the “family of joints” includes both a non-rotatable joint and a rotatable joint, which clearly reads on the elected species (ball joint) of FIG. 8. The dependent claims further recite a ball joint, a polygonal joint, and so forth. Again, the dependent claims read on the elected species (ball joint) of FIG. 8. Similarly, independent claim 88 recites a plurality of joints, including a rotatable joint structure. Clearly, the language of claim 88 is generic to all of the species, and specifically reads on the elected species (ball joint) of FIG. 8. The dependent claims 89-94 are also believed to be generic and/or read on the elected species of FIG. 8. Independent claim 95 recites “a family of linkage joints” including a ball joint among other joints. Again, the language of claim 88 is generic to all of the species, and specifically reads on the elected species (ball joint) of FIG. 8. The dependent claims 96-98 and 106-109 are also believed to be generic and/or read on the elected species of FIG. 8.

For at least these reasons, Applicants request the Examiner to withdraw the above restriction and consider claims 83-98, 101, 104 and 106-109.

Claim Rejections under 35 U.S.C. § 103(a)

In the Office Action, the Examiner rejected claims 99 and 110-113 under 35 U.S.C. § 103(a) as obvious over Gaines et al. (U.S. Patent No. 4,189,249, hereinafter "Gaines"). The Examiner further rejected 75, 78, 79, 81, 82, 102, 103 and 105 under 35 § 103(a) as being unpatentable over Gaines in view of Beach et al. (U.S. Patent No. 3, 423, 104, hereinafter "Beach"). Applicants traverse these rejections.

Legal Precedent

First, the burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d. 1430 (Fed. Cir. 1990). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). The Examiner must provide objective evidence, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002). Moreover, a statement that the proposed modification would have been “well within the ordinary skill of the art” based on individual knowledge of the claimed elements cannot be relied upon to establish a *prima facie* case of obviousness without some *objective*

reason to combine the teachings of the references. *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993); *In re Kotzab*, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000); *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999).

Second, when prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Third, it is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983); M.P.E.P. § 2145. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959); see M.P.E.P. § 2143.01.

Claim Features of Independent Claim 99 Omitted from Cited References

The rejection of independent claim 99 under Section 103 is improper because the cited reference that is used to reject the claim does not disclose and/or suggest the recited claim limitations. The present independent claim 99 recites a system, comprising a linkage having a uniform socket geometry along the entire length of the linkage, and a first joint coupled to the uniform socket geometry at a first end of the linkage; “wherein

the first joint comprises a plastic ball joint and the second joint comprises a metallic non-rotatable joint.” (Emphasis added.)

In rejecting independent claim 99, the Examiner specifically stated that:

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a system as disclosed by Gaines et al. wherein the ball joint is made of plastic as such material is a well-known, widely used and commercially available material within the art. Office Action, page 3.

Essentially, the Examiner has taken Official Notice of facts outside of the record that the Examiner apparently believes are capable of demonstration as being “well-known” in the art. Therefore, in accordance with M.P.E.P. § 2144.03, the Applicants hereby seasonably traverse and challenge the Examiner’s use of Official Notice. Specifically, the Applicants respectfully request that the Examiner produce evidence in support of the Examiner’s position as soon as practicable during prosecution and that the Examiner add a reference to the rejection in the next Official Action. If the Examiner finds such a reference and applies it in combination with the presently cited references, the Applicants further request that the Examiner specifically identify the portion of the newly cited reference that discloses the allegedly “well known” elements of the instant claim, as discussed above, or withdraw the rejection.

In the Office Action, the Examiner further contended that Gaines discloses a second “metallic non-rotatable joint 16.” See, Office Action, page 3. In contrast, to the Examiner’s assertion, Applicants note that nowhere in the Gaines reference is there a disclosure describing joint 16 as being non-rotatable. More importantly, as clearly disclosed by Gaines, both joints 10 and 16 are disclosed as being movable. See, Gaines,

claim 1. To the extent the joint 16 is movable, Fig. 1 of Gaines clearly suggests such a joint may be rotatable as well. Hence, notwithstanding Gaines's lack of disclosure of joint 16 as being non-rotatable, it is apparent in view of the claims and figures disclosed by Gaines that the joint 16 can not be non-rotatable. Thus, Gaines does not disclose or suggest the claimed second joint as a metallic non-rotatable joint, as recited by independent claim 99.

In view of these deficiencies, the cited references, taken alone or in combination, cannot render obvious the current independent claim 99 and its dependent claims. For these reasons, the Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103.

Improper Combination – References Teach Away From One Another As Applied to Independent Claim 75

The rejection of independent claim 75 over Gaines in view of Beach is improper because the Gaines and the Beach references teach away from one another such that they are not combinable and, therefore, cannot render independent claim 75 obvious. For example, independent claim 75 recites an integral automotive linkage comprising a hollow elongated member having a constant cross-section “wherein the constant cross-section comprises a multi-sided interior.” (Emphasis added.) Further, the claim recites a first joint member comprising “an attachment portion having a multi-sided perimeter,” and a second joint member comprising “another attachment portion having another multi-sided perimeter.” (Emphasis added.)

In combining the Gaines reference with the Beach reference the Examiner modified connector tube 20 of Gaines to have a square interior as taught by axle 10 of Beach. *See* Office Action, page 5. First, Applicants note that modifying the connector 20 disclosed by Gaines to have a square perimeter, as disclosed by Beach, also requires modifying rods 14 and 18 accordingly, so that the rods 14 and 18 properly fit within the

linkage 20. Applicants, however, submit that such an extensive modification to the system disclosed by the Gaines reference fundamentally changes the system's principle of operation and would require a substantial redesign. As disclosed by Gaines "[t]he shaft 14 is composed of a stud portion 34 which has been spun welded at 36 to a rod 38." Gaines, col. 2, lines 15-16. As further disclosed in Gaines, stud portion 40 is spun weld at 42 to an extension rod 44. As appreciated by those skilled in the art, spin welding is defined as "fusion of two objects (for example, plastics) by forcing them together while one of the pair is spinning; frictional heat melts the interface, spinning is stopped, and the bodies are held together until they are frozen in place (welded)." See McGraw-Hill Dictionary of Scientific and Technical Terms, Sixth Edition, page 1999. Hence, the basic principle of spin welding the rods 14 and 18 requires a circular or cylindrical geometry to enable rotation, thereby causing frictional heat between the rods 14 and 18 to weld them together. Any geometry other than cylindrical would preclude a spin welding process as taught by Gaines. Therefore, modifying rods 14 and 18 to have a square perimeter would preclude using spin welding to construct the system taught by Gaines. Consequently, such a modification clearly changes the principle in which the system disclosed by Gaines is constructed.

Accordingly, the cited references teach contrastingly different intended purposes and principles of operation and construction, which would change if the cited references were combined as suggested by the Examiner. As summarized above, a proposed modification or combination of references is entirely improper and insufficient to support a *prima facie* case of obviousness, where the proposed modification or combination would change the principle of operation, or would require a substantial redesign, or would render the cited reference unsatisfactory for its intended purpose.

In addition, the Examiner has not shown the requisite motivation or suggestion to modify or combine the cited references to reach the present claims. As summarized above, the Examiner must provide objective evidence, rather than subjective belief and

unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002). In the present rejection, the Examiner combined the cited references based on the *conclusory and subjective statement* that it would have been obvious “to modify a system as disclosed by Gaines et al. to have a square interior as taught by Beach et al. in order to enable first and second joint members to be more securely mounted within first and second sockets, the square preventing any relative rotation or slippage between the joint members and the hollow member.” Office Action, page 5. Accordingly, Applicants challenge the Examiner to produce *objective evidence* of the requisite motivation or suggestion to combine the cited references, or remove the foregoing rejection of independent claim 75 under 35 U.S.C. § 103.

For at least these reasons, neither Gaines, nor Beach, nor their hypothetical combination can render independent claim 75 obvious. Accordingly, Applicants request that the Examiner withdraw the rejection and allow independent claim 75, as well as those claims depending therefrom.

Claim Features of Dependent Claims 102, 110 and 113 Omitted from Cited References

In the Office Action, the Examiner rejected dependent claims 102, 110 and 113 as being obvious in view of Gaines or Gaines in view of Beach. However, Applicants note that apart from being dependent on an allowable base claim, the rejection of claims 102, 110 and 113 is improper because Gaines does not disclose or suggest each and every element recited by the dependent claims.

For example, dependent claim 102 recites “wherein the female joint is a polygonal receptacle joint.” In contrast, Gaines does not disclose a polygonal receptacle joint. In the Office Action, the Examiner pointed to ends 17 and 19 of a straddle ball joint disclosed by Gaines as the polygonal receptacle joint. *See* Office Action, page 6. However, Applicants respectfully note that the portions of Gaines set forth by the

Examiner are merely exterior portions of joint 16 and clearly do not constitute a female joint which is a polygonal receptacle joint, as recited by dependent claim 102 and as similarly recited by dependent claim 110. Similarly, dependent claim 113 recites "a hooked-shaped joint," which the Applicants contend is clearly not disclosed by the Gaines reference. The Examiner has again misinterpreted a portion of Gaines (joint 16, Fig. 1).

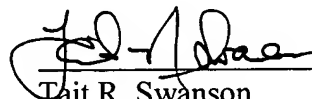
For these reasons, among others, the Applicants respectfully request withdrawal of the rejections of dependent claims 102, 110 and 113 under 35 U.S.C. § 103.

Conclusion

Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner wishes to resolve any issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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